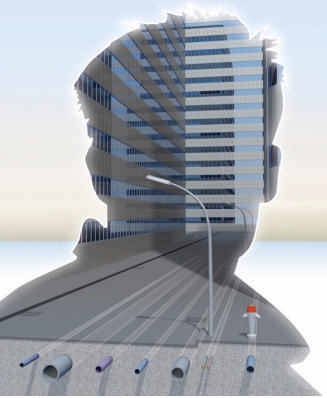
Leica CS25
User Manual



Version 1.0
English

- when it has to be **right**

Leica Geosystems

Introduction

Purchase

Congratulations on the purchase of a Leica CS25.

This manual contains important safety directions as well as instructions for setting up the product and operating it. Refer to "6 Safety Directions" for further information.
Read carefully through the User Manual before you switch on the product.

Product identification

The type and serial number of your product are indicated on the type plate.
Enter the type and serial number in your manual and always refer to this information when you need to contact your agency or Leica Geosystems authorised service workshop.

Type: _____

Serial No.: _____

Symbols

The symbols used in this manual have the following meanings:

Type	Description
⚠ **Danger**	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ **Warning**	Indicates a potentially hazardous situation or an unintended use which, if not avoided, could result in death or serious injury.
⚠ **Caution**	Indicates a potentially hazardous situation or an unintended use which, if not avoided, may result in minor or moderate injury and/or appreciable material, financial and environmental damage.
☞	Important paragraphs which must be adhered to in practice as they enable the product to be used in a technically correct and efficient manner.

Trademarks

- Windows is a registered trademark of Microsoft Corporation in the United States and other countries
- CompactFlash and CF are trademarks of SanDisk Corporation
- Bluetooth is a registered trademark of Bluetooth SIG, Inc.
- SD is a trademark of the SD Card Association

All other trademarks are the property of their respective owners.

Validity of this manual

This manual applies to the Leica CS25 rugged tablet computer.

Available documentation

Name	Description/Format	
CS25 User Manual	All instructions required in order to operate the product to a basic level are contained in the User Manual. Provides an overview of the product together with technical data and safety directions.	✓

Name	Description/Format	
Zeno GIS Getting Started Guide	Describes the general working of the product in standard use. Intended as a quick reference field guide.	✓

Name	Description/Format	
Zeno GIS Help *	Overall comprehensive help to the product and application functions. Included are detailed descriptions of special software/hardware settings and software/hardware functions.	

* only available as Online Help

Refer to the following resources for all CS25 documentation/software:

- the Leica CS25 DVD
- Windows 7 Recovery DVD (including User Guide)
- https://myworld.leica-geosystems.com

myworld @Leica Geosystems

myWorld@Leica Geosystems (**https://myworld.leica-geosystems.com**) offers a wide range of services, information and training material.
With direct access to myWorld, you are able to access all relevant services whenever it is convenient for you, 24 hours a day, 7 days per week. This increases your efficiency and keeps you and your equipment instantly updated with the latest information from Leica Geosystems.

Service	Description
myProducts	Simply add all Leica Geosystems products that you and your company own. View detailed information on your products, buy additional options or Customer Care Packages (CCPs), update your products with the latest software and keep up-to-date with the latest documentation.
myService	View the service history of your products in Leica Geosystems Service Centers and detailed information on the services performed on your products. For your products that are currently in Leica Geosystems Service Centers view the current service status and the expected end date of service.
mySupport	Create new support requests for your products that will be answered by your local Leica Geosystems Support Team. View the complete history of your Support and view detailed information on each request in case you want to refer to previous support requests.
myTraining	Enhance your product knowledge with the Leica Geosystems Campus - Information, Knowledge, Training. Study the latest online training material or download training material on your products. Keep up-to-date with the latest News on your products and register for Seminars or Courses in your country.

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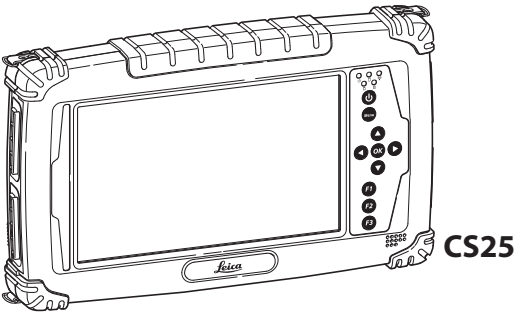
1 Description of the System

1.1 Overview

System components



CS25_001

1.2 Terminology

CS25 general description

The CS25 is a compact high performance, low weight rugged tablet computer designed for outdoor & fieldwork usage. The CS25 can withstand severe environmental conditions including vibration, shock, moisture and temperature variations. The CS25 is suitable for use in harsh environments such as construction sites, warehouses, military, manufacturing and field service.

CS25 available models

Model	Touch screen	Colour display	Internal GSM/CDMA/ UMTS modem	Internal batteries*1	64 GB SSD (solid-state drive)	Bluetooth	Wireless LAN 802.11b/g	Windows 7 Ultimate
CS25	✓	✓	✓	✓	✓	✓	✓	✓

Use the supplied stylus on the screens of the touch screen.

*1 removable

1.3 System Concept

1.3.1 Software Concept

Software for CS25 tablet computer

Software type	Description
Windows 7 ultimate	This software includes: - The language-specific version of Windows 7. - The basic functionality of the CS.

1.3.2 Power Concept

General

Use the Leica Geosystems batteries, chargers and accessories or accessories recommended by Leica Geosystems to ensure the correct functionality of the instrument.

Power options

Model	Power supply
CS25	Internally by ALG7-08B*1 battery, OR Externally by ALG7-10A*2 AC/DC adapter, OR Externally by HH-12V car adapter If an external power supply is connected and the internal batteries are inserted, then the external power is used. The internal batteries are charged.

*1 manufacturer: JHT energy International Co Ltd

*2 manufacturer: EDAC Power Electronics Co Ltd

1.3.3 Data Storage Concept

Description

Data is stored on a memory device. The memory device can be a USB stick or internal memory.

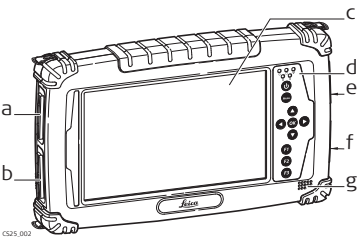
Memory device

USB stick:	The CS25 tablet computer has a USB port fitted as standard.
Internal memory:	The CS25 tablet computer has an internal memory fitted as standard. Available capacity: 64 GB.

Unplugging the USB stick from the CS25 tablet computer without safely remove the USB stick before can cause loss of data. Only unplug the USB stick when the CS25 tablet computer is switched off or after you have used Safely Remove Hardware function of the CS25 tablet computer.

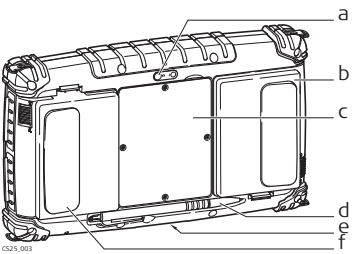
1.4 CS25 Components

Upside of CS25



a) DSUB9 port
b) USB host port for USB stick
c) Screen
d) Keyboard
e) Micro in, Audio out and LAN
f) Power socket and USB host port for USB stick
g) Speaker

Underside of CS25

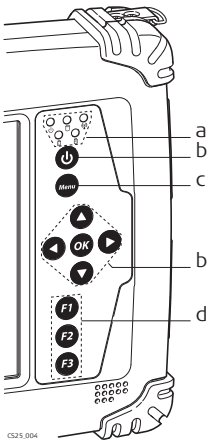


a) Digital camera
b) Battery compartment R
c) SIM card slot
d) Stylus
e) Docking station contacts
f) Battery compartment L

2 User Interface

2.1 Keyboard

Keyboard display CS25



a) LED indicators
b) ON/OFF
c) Menu
d) Arrow keys, OK
e) Function keys

Keys

Key	Function
ON/OFF	If CS25 already off: Turns on CS25 when held for 5 s. If CS25 already on: • Puts CS25 into stand-by mode when held < 4 s. Refer to "Power Functions". • Turns off CS25 when held for 8 s.
Menu	Start Menu button options. Refer to "4.1 Menu Button Options".
Arrow keys	Move the focus on the screen.
OK	Selects the highlighted line and leads to the next logical menu / dialog.
Function keys F1-F3	Programmable hotkeys.

2.2 Operating Principles

Keyboard and touch screen

The user interface is operated either by the keyboard or by the touch screen with supplied stylus. The workflow is the same for keyboard and touch screen entry, the only difference lies in the way information is selected and entered.

Operation by keyboard
Information is selected and entered using the keys. Refer to "2.1 Keyboard" for a detailed description of the keys on the keyboard and their function.

Operation by touch screen
Information is selected and entered on the screen using the supplied stylus.

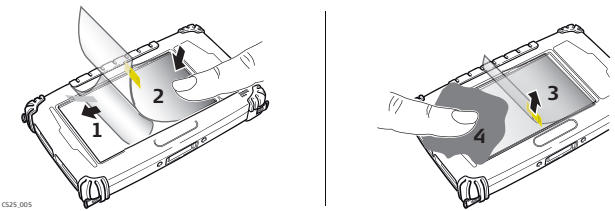
Operation	Description
To select an item	Tap on the item.
To start the edit mode in editable fields	Tap on the editable field.
To highlight an item or parts of it for editing	Drag the supplied stylus from the left to the right.
To accept data entered into an editable field and exit the edit mode	Tap on the screen outside of the editable field.
To open a context-sensitive menu	Tap on the item and hold for 2 s.

3 Operation

3.1 Equipment Setup

3.1.1 Fixing the Display Foil to the CS

Fixing the display foil to the CS25 tablet computer step-by-step



Step	Description
☞	Ensure that the display of the CS25 is free of dust and grease.
☞	The non-reflecting display foil has a silver-coloured sticker to peel away the carrier foil from the actual display foil.
1.	Touch the silver-coloured sticker with two fingers and pull it slowly upwards. The carrier foil is peeling away. ☞ Do not peel the carrier foil more than 2 cm - 3 cm away.

Step	Description
2.	Fix the laid open adhesive underside of the display foil at the display border. ☞ Pay attention that the display foil is not fixed between display and display frame.
3.	Peel away the carrier foil bit by bit and smooth it out slowly onto the display.
4.	Potential air bubbles between display and display foil have to be smoothed out using the included microfibre cloth. ☞ Do not use sharp objects!

3.1.2 Inserting and Removing a SIM Card

- Keep the card dry.
- Use it only within the specified temperature range.
- Do not bend the card.
- Protect the card from direct impacts.

Failure to follow these instructions could result in data loss and/or permanent damage to the card.

Caution

Always ground yourself to remove any static charge before touching the CPU card. The electronic devices are sensitive to static electricity.

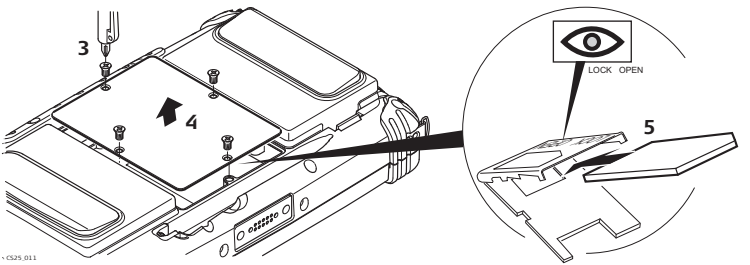
Precautions:

1) Only experienced personnel should open the mechanical housing of the tablet computer.
2) Use a grounding wrist strap all the time.
3) Place all the electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

Insert and remove a SIM card step-by-step

Apply general practice for working with static-sensitive devices when you open the CS25 tablet computer, insert the SIM card and closing the CS25 tablet computer:

- Discharge any static charge before opening the CS25 tablet computer and working with the SIM card
- CS25 tablet computer must not be subject to high electrostatic potentials when it is open
- Minimise contact with internal components of the CS25 tablet computer
- Avoid any discharges of static electricity near the CS25 tablet computer when inserting the SIM card



	Description
☞	The SIM card is inserted into a SIM card holder inside the CS25 tablet computer.
1.	Turn off the CS25 tablet computer. Refer to " Turning CS25 tablet computer on step-by-step".
2.	Turn over the CS25 tablet computer to the underside.
3.	Loosen the screws inside the cover using the screwdriver end of the stylus.
4.	Detach the cover from the CS25 tablet computer.
5.	Slide the SIM card firmly into the slot. ☞ Do not force the card into the slot. The card should be held with the contacts facing the slot.
6.	Close the SIM card holder and push into locked position.
7.	Attach the slot cover and tighten the screws.
8.	To remove the card, detach the slot cover of the CS25 tablet computer.
9.	Open the SIM card holder and remove the SIM card.
10.	Remove the SIM card and attach the slot cover.

3.2 Power Functions

Turning CS25 tablet computer on step-by-step

Step	Description
1.	Place the CS25 tablet computer on a flat and stable surface or hold the CS25 tablet computer in your hand.
2.	Ensure that the CS25 tablet computer is either connected with the AC power adapter or the batteries are charged up.
3.	Press and hold power key ( ) for 5 s.

Turning CS25 tablet computer on step-by-step

Step	Description
1.	Use the “Shut Down” command of your operating system to turn off the CS25 tablet computer. Wait for at least five seconds after turning off the CS25 tablet computer before turning it back on.

3.3 Batteries

Battery power system

The CS25 tablet computer is designed to work with two removable battery packs placed inside the battery pack compartment. The fully charged battery packs provide several hours of battery life, which can further be extended by using power management features through the BIOS setup. The system includes power management software which allows the battery to report the amount of charge percentage left in the battery. Refer to "4.2 Hot Tab Software Utility Functions".

3.3.1 Operating Principles

Charging / first-time use

- The battery must be charged prior to using it for the first time because it is delivered with an energy content as low as possible.
- The permissible temperature range for charging is between 0°C to +40°C/ +32°F to +104°F. For optimal charging, we recommend charging the batteries at a low ambient temperature of +10°C to +20°C/+50°F to +68°F if possible.
- It is normal for the battery to become warm during charging. Using the chargers recommended by Leica Geosystems, it is not possible to charge the battery if the temperature is too high.

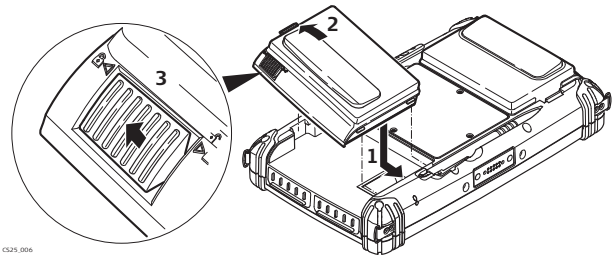
- For new batteries or batteries that have been stored for a long time (> three months), it is effectual to make only one charge/discharge cycle.
- For Li-Ion batteries, a single discharging and charging cycle is sufficient. We recommend carrying out the process when the battery capacity indicated on the charger or on a Leica Geosystems product deviates significantly from the actual battery capacity available.

Operation / Discharging

- The batteries can be operated from -20°C to +55°C/-4°F to +131°F.
- Low operating temperatures reduce the capacity that can be drawn; high operating temperatures reduce the service life of the battery.

3.3.2 Changing the Battery

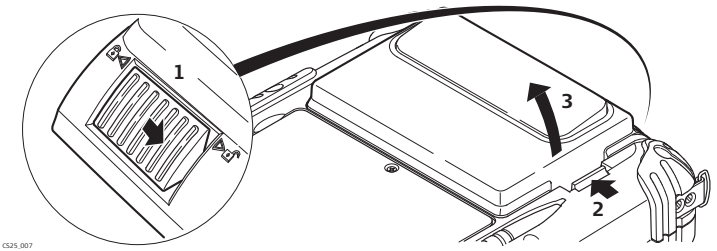
Insert the battery on the CS25 tablet computer step-by-step



Step	Description
☞	Turn CS25 tablet computer over to gain access to the battery compartments.
1.	Place the battery into the battery compartment.
2.	Press the battery down into the battery compartment until it clicks into position.

Step	Description
3.	Pushing the slide fastener in the direction of the arrow with the close-lock symbol to fasten the battery. ☞ The battery must be locked to ensure IP65 protection. Refer to "Environmental specifications".

Remove the battery on the CS25 tablet computer step-by-step



Step	Description
☞	Turn CS25 tablet computer over to gain access to the battery compartments.
1.	Push the slide fastener in the direction of the arrow with the open-lock symbol to release the battery.
2.	Press simultaneously on the top side and on the bottom side of the battery.
3.	Remove the battery from the battery compartment.

3.3.3 Charging the Battery

Danger

If unit is not connected to ground, death or serious injury can occur.

Precautions:

To avoid electric shock power cable and power outlet must be grounded.

The following advice is only valid for battery charger, power adapter and car adapter.

Warning

If you open the product, either of the following actions may cause you to receive an electric shock.

- Touching live components
- Using the product after incorrect attempts were made to carry out repairs

Precautions:

Do not open the product. Only Leica Geosystems authorised service workshops are entitled to repair these products.

The following advice is only valid for batteries, power adapter or docking station.

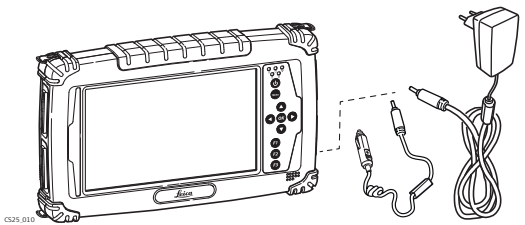
Caution

The product is not designed for use under wet and severe conditions. If unit becomes wet it may cause you to receive an electric shock.

Precautions:

Use the product only in dry environments, for example in buildings or vehicles. Protect the product against humidity. If the product becomes humid, it must not be used!

Charge battery step-by-step



Step	Description
☞	When charging the batteries, the CS25 tablet computer can be on or off. Charging is faster when the CS25 tablet computer is off.
1.	Connect the ALG7-10A power adapter or HH-12V car adapter with the CS25 tablet computer and an A/C plug. The batteries start charging.
2.	The power LED on the CS25 tablet computer switches on. When CS25 tablet computer's batteries are fully charged the LED switches off again. ☞ Refer to " LED indicators" for information about the power LED.

Battery charging mechanism

Balance of battery charging mode

Both battery packs are at a low-power level which is about 5%.

a) If the power level of the first battery is 5% more than the second battery , the tablet computer charges the lower power battery first.

b) If the power level of the first battery is more than the second battery by less than 5%, the tablet computer charges both the batteries.

Dual battery charging mode

Both battery packs are at a low-power level which is about 10%.

a) If the power level of both batteries is below 10%, the tablet computer charges both batteries simultaneously.

b) If the power level of both batteries is more than 10%, the tablet computer changes the charging mode to the balance charging mode.

c) If one battery is fully charged, the other is at a low-power level, the tablet computer charges the battery which is at a low-power level.
d) If both the batteries are fully charged, the tablet computer switches off the charging current.

3.3.4 Switching between Left and Right Battery

Switch between left and right battery step-by-step

Step	Description
☞	Left battery and right battery are located on the underside. Refer to "1.4 CS25 Components".
☞	Press and release Menu button three times. The status of batteries and current battery usage window appears on the screen. Refer to "4.1 Menu Button Options".
1.	Press and hold F3 for 3 s. The CS25 tablet computer switches from left to right battery.
2.	The battery status is shown on both the screen and the OSD indicator.

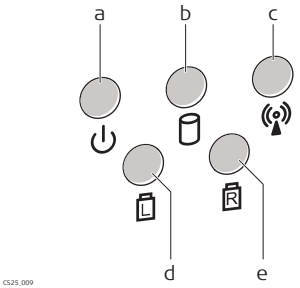
3.4 LED Indicators on CS25

LED indicators

Description

The CS25 tablet computer has **L**ight **E**mitting **D**iode indicators. They indicate the basic tablet computer status.

Diagram



a) Power LED
b) Storage LED
c) Wi-Fi LED
d) Battery LED L
e) Battery LED R

Description of the LEDs

IF the	is	THEN
Power LED	off	power is off.

IF the	is	THEN
	green	power is okay.
Storage LED	off	xxx.
	flashing green	HD is reading. Data is being written.
Wi-Fi LED	off	Wi-Fi is off.
	flashing green	CS25 is connected to a wireless network.
Battery LED L	off	power is okay. The battery is fully charged, CS25 tablet computer is externally powered by AC adapter or right battery is discharging.
	green	power is ok. The battery is being discharged.
	orange	power is ok. The battery is being charged.
	red	power is low (< 3%) or battery is bad. It is not allowed to switch discharge status to left battery. Change the battery.
Battery LED R	off	power is okay. The battery is fully charged, CS25 tablet computer is externally powered by AC adapter or left battery is discharging.
	green	power is ok. The battery is being discharged.

IF the	is	THEN
	orange	power is ok. The battery is being charged.
	red	power is low (< 3%) or battery is bad. It is not allowed to switch discharge status to right battery. Change the battery.

3.5 Using the Digital Camera

Overview

The CS25 tablet computer is equipped with a digital camera located at the underside (refer to "1.4 CS25 Components").

Taking a picture step-by-step

	Description
1.	Press F1 function key to start HotTab Hotkey Utility application. Refer to "4.2 Hot Tab Software Utility Functions".
2.	Assign Webcam to **F2 Short** function key.

	Description
3.	Press and release F2 function key to start the digital camera application.
4.	Aim the camera to the desired target.
5.	Check the view at the display.

	Description
6.	Click the camera icon on the top bar to take the picture. ☞ The digital camera application allows recording videos as well as taking images. In addition, the LED light can be turned on and off.
7.	Click the return icon on the top bar to store the picture and to return to the main menu. Click the garbage icon to reject the picture.

3.6 Calibrating the Touch Screen

Calibrate the touch screen step-by-step

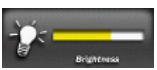
Step	Description
1.	Turn on the CS25 tablet computer. Refer to " Turning CS25 tablet computer on step-by-step".
2.	Click on **Start** button, then go to **Control Panel**.
3.	In Category view, click on **Hardware and Sound** link, click on **Tablet PC Settings** and then go to **Display** Tab. ☞ In Icons view, click on **Tablet PC Settings** icon, and then go to **Display** Tab.
4.	Click on **Calibrate...** to start the **Digitizer Calibration Tool**.
5.	Tap the crosshair with the stylus each time it appears on the screen. ☞ A window pops up when the calibration process is completed.
6.	Click on **Yes** to save the calibration data or click on **No** to reject the calibration data.

4 Software

4.1 Menu Button Options

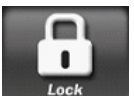
Menu button options

The following six **Menu** options are available on the CS25 tablet computer:
1) Screen brightness
2) Volume
3) Battery usage and battery status
4) Wireless communication function
5) System information about software versions
6) Keyboard lock

Menu button	Function
Press and release once	Shows status of screen brightness.  Press right/up arrow button or drag with touch to increase the screen brightness. Press left/down arrow button or drag with touch to decrease the screen brightness.

Menu button	Function
Press and release twice	Shows status of volume. Press right/up arrow button or drag with touch to increase the volume. Press left/down arrow button or drag with touch to decrease the volume.
Press and release three times	Shows status of batteries and current battery usage.

Menu button	Function
Press and release four times	Shows status of wireless communication functions and LED indicator. Press up/down arrow button or tick with touch to highlight a specific wireless communication function. Press left/right arrow button or tick with touch: • If wireless communication function is enabled: Disables wireless communication function. • If wireless communication function is disabled: Enables wireless communication function.

Menu button	Function
	Checking/unchecking of the LED indicator turns on/off the LEDs of the CS25 tablet computer.
Press and release five times	Shows current software version.
Press and hold for 5 s	Locks/unlocks keyboard.  If keyboard is unlocked: Locks keyboard. If keyboard is locked: Unlocks keyboard.

4.2 Hot Tab Software Utility Functions

Hot Tab software utility functions

The following functions are available on the CS25 tablet computer:

1) Virtual Mouse
2) Screen Rotation
3) Onscreen Keyboard
4) Windows Power Management
5) Touch Lock

Function	Description of function
Hot Tab software utility functions	Press **F1** short and release to start Hot Tab software utility functions.
Virtual Mouse	Click **Virtual Mouse** to open a virtual mouse on the screen.

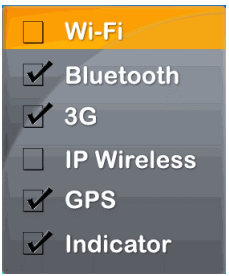
Function	Description of function
Screen Rotation	Click **Screen Rotation** to rotate the screen clock-wise by 45 °.
Onscreen Keyboard	Click **Onscreen Keyboard** to open a keyboard on the screen.
Programmable hotkey	You can assign a function of your choice to the function keys F1 Long, F2 Short, F2 Long, F3 Short and F3 Long. Select F1 Long, click **Browse** and select the desired program file you want to assign to F1 Long.

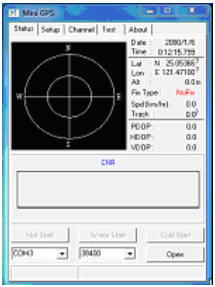
Function	Description of function
	Press and hold F1 for 4 s to perform the function configured for F1 Long. Press F2 short and release to perform the function configured for F2 Short. Press and hold F2 for 4 s to perform the function configured for F2 Long. Press F3 short and release to perform the function configured for F3 Short.
Switch battery	Press and hold F3 for 4 s to change power from main battery to second battery. ☞ Check battery status of second battery before switching (› 10 %).

Function	Description of function
Windows Power Management	Click **CONFIG** to open Windows Power Management.
Touch Lock	Click **Touch Lock** to lock the touch screen. To unlock the touch screen move the arrow to the right.

4.3 Mini GPS Application

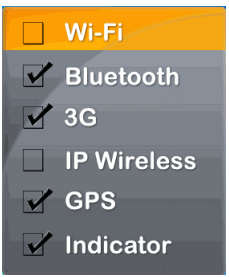
Start Mini GPS application step-by-step

Step	Description
☞	Ensure that **GPS** is checked in the Wireless communication status. Refer to "4.1 Menu Button Options". 

Step	Description
1.	Double-click the **Mini GPS** icon from the desktop to start the Mini GPS application. 
2.	Go to the **Status** Tab.
3.	Select **COM3** as COM port and **38400** as baud rate.
4.	Click **Open**. The NMEA message as configured on the **Setup** Tab is sent to the COM port.

4.4 WWAN Application

Start WWAN application step-by-step

Step	Description
1.	Insert SIM card. Refer to "3.1.2 Inserting and Removing a SIM Card".
☞	Ensure that **3G** is checked in the Wireless communication status. Refer to "4.1 Menu Button Options". 

Step	Description
2.	Double-Click **OneClick Internet** shortcut from the desktop when the modem has been activated. The OneClick Internet application window appears.
3.	Click **Connect**. The software loads automatically the required settings and establishes a connection to the Internet. You are connected to the Internet when the software indicates connected. Use the Internet Explorer to access the Internet.

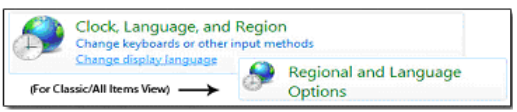
Step	Description
4.	When the connection cannot be established, click **Settings** and select the correct settings manually.
5.	Click Set Profile to store the settings and continue with step 3..

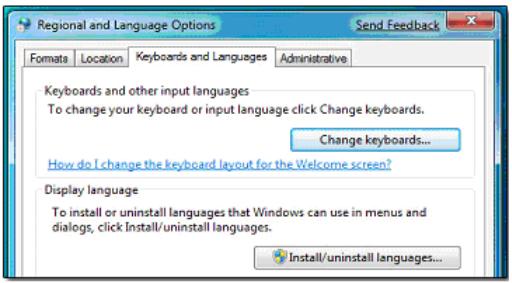
4.5 Installing a Language Pack in Windows 7

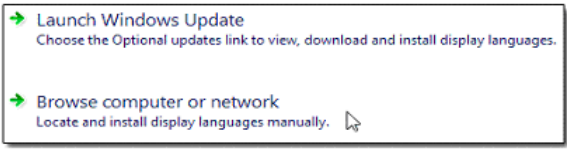
Description

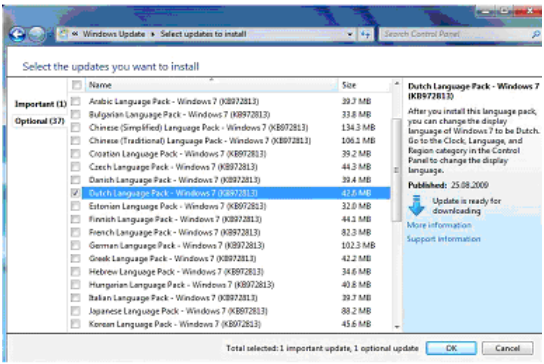
The user interface of Windows 7 can be translated and converted to another language, with the use of a language pack. The language pack is commonly known as MUI (Multilingual User Interface). With language pack, text in wizards, dialog boxes, menus, and other components can be converted into another display language. Additional language packs are only supported Windows 7 Ultimate and Windows 7 Enterprise. You can download additional language packs by Windows Update.

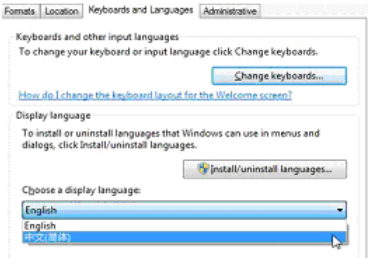
Install language pack on the CS25 tablet computer step-by-step

Step	Description
1.	Click on **Start** button, then go to **Control Panel**.
2.	In Category view, click on **Clock, Language, and Region** link.  Clock, Language, and Region Change keyboards or other input methods Change display language (For Classic/All Items View) Regional and Language Options

Step	Description
☞	In Icons view, click on **Regional and Language Options** icon, and then go to **Keyboards and Languages** Tab. 
3.	Click on **Install or uninstall display languages** under "Region and Language" section or **Install/uninstall languages** under "Display Language" section.
4.	In the "Install or uninstall display languages" wizard, click on **Install display languages**.

Step	Description
5.	Click **Launch Windows Update** and install language packs manually. 
6.	Click **XX optional updates are available**.

Step	Description
7.	Tick the Language Pack you want to install and click **OK** to install it. 
☞	The installation can take a while. Once the installation is finished, you can directly switch to the installed language pack. When you switch language packs, you have to log off and on again.

Step	Description
☞	To change to a language pack that has already been installed, go to **Keyboards and Languages** Tab in **Regional and Language Options** window and choose the display language desired. 

4.6 Windows Activation Guide

Activate Windows step-by-step

Step	Description
	Ensure to have your licence code available.
1.	Establish an Internet connection using Wi-Fi or an Ethernet cable.
2.	Click on **Start** button, then go to **Control Panel**.
3.	In Category view, click on **System and Security** link and click on **System**. In Icons view, click on **System** icon.
4.	Scroll down to the bottom of the screen and click on **You must activate today, Activate Windows now**.
5.	Click on **Activate Windows online now**. When the activation was successful, at the bottom of the System screen the message Windows is activated is displayed.
	If you are not able to establish an Internet connection using Wi-Fi or an Ethernet cable, select **See other ways to activate**. Select **Use the automated phone system** and follow the instructions.

4.7 Good to Know...

My WLAN does not see any networks, what can be wrong?

Step	Description
1.	Click on your wireless network icon and select "Open network and sharing center".
2.	Click "Change adapter settings" on the left side.
3.	Click and hold the stylus on "Wireless Network Connection" and select properties.
4.	Click "Configure" and choose the "Advanced" Tab.
5.	Select the option "Radio On/Off", select "Enable" in the field "Value" and click **OK**. WLAN should work as intended.

How to do a Ctrl+Alt+Delete-sequence on the CS25 tablet computer?

Step	Description
1.	Press simultaneously (▲) and (▼) button.

5 Care and Transport

5.1 Transport

Transport in a road vehicle	Never carry the product loose in a road vehicle, as it can be affected by shock and vibration. Always carry the product in its transport container and secure it.
Shipping	When transporting the product by rail, air or sea, always use the complete original Leica Geosystems packaging, transport container and cardboard box, or its equivalent, to protect against shock and vibration.
Shipping, transport of batteries	When transporting or shipping batteries, the person in charge of the product must ensure that the applicable national and international rules and regulations are observed. Before transportation or shipping, contact your local passenger or freight transport company.

5.2 Storage

Product

Respect the temperature limits when storing the equipment, particularly in summer if the equipment is inside a vehicle. Refer to "7 Technical Data" for information about temperature limits.

Li-Ion batteries

- Refer to "7 Technical Data" for information about storage temperature range.
- At the recommended storage temperature range, batteries containing a 10% to 50% charge can be stored for up to one year. After this storage period the batteries must be recharged.
- Remove batteries from the product and the charger before storing.
- After storage recharge batteries before using.
- Protect batteries from damp and wetness. Wet or damp batteries must be dried before storing or use.
- A storage temperature range of -20°C to +30°C/-4°F to 86°F in a dry environment is recommended to minimise self-discharging of the battery.

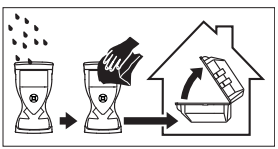
5.3 Cleaning and Drying

Product and accessories

- Use only a clean, soft, lint-free cloth for cleaning. If necessary, moisten the cloth with water or pure alcohol. Do not use other liquids; these may attack the polymer components.

Damp products

Dry the product, the transport container, the foam inserts and the accessories at a temperature not greater than 40°C/104°F and clean them. Do not repack until everything is dry. Always close the transport container when using in the field.



Cables and plugs

Keep plugs clean and dry. Blow away any dirt lodged in the plugs of the connecting cables.

Connectors with dust caps

Wet connectors must be dry before attaching the dust cap.

6 Safety Directions

6.1 General Introduction

Description

The following directions enable the person responsible for the product, and the person who actually uses the equipment, to anticipate and avoid operational hazards.

The person responsible for the product must ensure that all users understand these directions and adhere to them.

6.2 Intended Use

Permitted use

- Remote control of product.
- Data communication with external appliances.

Adverse use

- Use of the product without instruction.
- Use outside of the intended limits.
- Disabling safety systems.
- Removal of hazard notices.
- Opening the product using tools, for example screwdriver, unless this is permitted for certain functions.
- Modification or conversion of the product.
- Use after misappropriation.
- Use of products with recognisable damages or defects.
- Use with accessories from other manufacturers without the prior explicit approval of Leica Geosystems.
- Inadequate safeguards at the working site, for example when measuring on roads.
- Controlling of machines, moving objects or similar monitoring application without additional control- and safety installations.

Warning

Adverse use can lead to injury, malfunction and damage.
It is the task of the person responsible for the equipment to inform the user about hazards and how to counteract them. The product is not to be operated until the user has been instructed on how to work with it.

6.3 Limits of Use

Environment

Suitable for use in an atmosphere appropriate for permanent human habitation: not suitable for use in aggressive or explosive environments.

Danger

Local safety authorities and safety experts must be contacted before working in hazardous areas, or close to electrical installations or similar situations by the person in charge of the product.

The following advice is only valid for battery charger, power adapter and car adapter.

Environment

Suitable for use in dry environments only and not under adverse conditions.

6.4 Responsibilities

Manufacturer of the product

Leica Geosystems AG, CH-9435 Heerbrugg, hereinafter referred to as Leica Geosystems, is responsible for supplying the product, including the user manual and original accessories, in a safe condition.

Manufacturers of non Leica Geosystems accessories

The manufacturers of non Leica Geosystems accessories for the product are responsible for developing, implementing and communicating safety concepts for their products, and are also responsible for the effectiveness of those safety concepts in combination with the Leica Geosystems product.

Person in charge of the product

The person in charge of the product has the following duties:

- To understand the safety instructions on the product and the instructions in the user manual.
- To be familiar with local regulations relating to safety and accident prevention.
- To inform Leica Geosystems immediately if the product and the application becomes unsafe.
- To ensure that the national laws, regulations and conditions for the operation of radio transmitters are respected.

Warning The person responsible for the product must ensure that it is used in accordance with the instructions. This person is also accountable for the training and the deployment of personnel who use the product and for the safety of the equipment in use.

6.5 Hazards of Use

Warning

The absence of instruction, or the inadequate imparting of instruction, can lead to incorrect or adverse use, and can cause accidents with far-reaching human, material, financial and environmental consequences.

Precautions:
All users must follow the safety directions given by the manufacturer and the directions of the person responsible for the product.

Danger

Because of the risk of electrocution, it is dangerous to use poles and extensions in the vicinity of electrical installations such as power cables or electrical railways.

Precautions:
Keep at a safe distance from electrical installations. If it is essential to work in this environment, first contact the safety authorities responsible for the electrical installations and follow their instructions.

Warning

During dynamic applications, for example stakeout procedures there is a danger of accidents occurring if the user does not pay attention to the environmental conditions around, for example obstacles, excavations or traffic.

Precautions:

The person responsible for the product must make all users fully aware of the existing dangers.

Warning

Inadequate securing of the working site can lead to dangerous situations, for example in traffic, on building sites, and at industrial installations.

Precautions:

Always ensure that the working site is adequately secured. Adhere to the regulations governing safety and accident prevention and road traffic.

Warning

If computers intended for use indoors are used in the field there is a danger of electric shock.

Precautions:

Adhere to the instructions given by the computer manufacturer regarding field use with Leica Geosystems products.

Caution

If the accessories used with the product are not properly secured and the product is subjected to mechanical shock, for example blows or falling, the product may be damaged or people can sustain injury.

Precautions:
When setting-up the product, make sure that the accessories are correctly adapted, fitted, secured, and locked in position.
Avoid subjecting the product to mechanical stress.

Warning

If the product is used with accessories, for example masts, staffs, poles, you may increase the risk of being struck by lightning.

Precautions:
Do not use the product in a thunderstorm.

Warning

Using a battery charger not recommended by Leica Geosystems can destroy the batteries. This can cause fire or explosions.

Precautions:
Only use chargers recommended by Leica Geosystems to charge the batteries.

Caution

During the transport, shipping or disposal of batteries it is possible for inappropriate mechanical influences to constitute a fire hazard.

Precautions:

Before shipping the product or disposing of it, discharge the batteries by running the product until they are flat.

When transporting or shipping batteries, the person in charge of the product must ensure that the applicable national and international rules and regulations are observed. Before transportation or shipping contact your local passenger or freight transport company.

Warning

High mechanical stress, high ambient temperatures or immersion into fluids can cause leakage, fire or explosions of the batteries.

Precautions:

Protect the batteries from mechanical influences and high ambient temperatures. Do not drop or immerse batteries into fluids.

Warning

If battery terminals come in contact with jewellery, keys, metallised paper or other metals, short circuited battery terminals can overheat and cause injury or fire, for example by storing or transporting in pockets.

Precautions:

Make sure that the battery terminals do not come into contact with metallic objects.

The following advice is only valid for battery charger, power adapter and car adapter.

Warning

If you open the product, either of the following actions may cause you to receive an electric shock.

- Touching live components
- Using the product after incorrect attempts were made to carry out repairs

Precautions:
Do not open the product. Only Leica Geosystems authorised service workshops are entitled to repair these products.

The following advice is only valid for batteries, power adapter or docking station.

Caution

The product is not designed for use under wet and severe conditions. If unit becomes wet it may cause you to receive an electric shock.

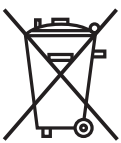
Precautions:
Use the product only in dry environments, for example in buildings or vehicles. Protect the product against humidity. If the product becomes humid, it must not be used!

Warning

If the product is improperly disposed of, the following can happen:

- If polymer parts are burnt, poisonous gases are produced which may impair health.
- If batteries are damaged or are heated strongly, they can explode and cause poisoning, burning, corrosion or environmental contamination.
- By disposing of the product irresponsibly you may enable unauthorised persons to use it in contravention of the regulations, exposing themselves and third parties to the risk of severe injury and rendering the environment liable to contamination.

Precautions:



The product must not be disposed with household waste.
Dispose of the product appropriately in accordance with the national regulations in force in your country.
Always prevent access to the product by unauthorised personnel.

Product-specific treatment and waste management information can be downloaded from the Leica Geosystems home page at http://www.leica-geosystems.com/treatment or received from your Leica Geosystems dealer.

Warning

Only Leica Geosystems authorised service workshops are entitled to repair these products.

6.6 Electromagnetic Compatibility EMC

Description

The term Electromagnetic Compatibility is taken to mean the capability of the product to function smoothly in an environment where electromagnetic radiation and electrostatic discharges are present, and without causing electromagnetic disturbances to other equipment.

Warning

Electromagnetic radiation can cause disturbances in other equipment.

Although the product meets the strict regulations and standards which are in force in this respect, Leica Geosystems cannot completely exclude the possibility that other equipment may be disturbed.

The product is a class A product when operated with the internal batteries. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Caution

There is a risk that disturbances may be caused in other equipment if the product is used with accessories from other manufacturers, for example field computers, personal computers, two-way radios, non-standard cables or external batteries.

Precautions:

Use only the equipment and accessories recommended by Leica Geosystems. When combined with the product, they meet the strict requirements stipulated by the

guidelines and standards. When using computers and two-way radios, pay attention to the information about electromagnetic compatibility provided by the manufacturer.

Caution

Disturbances caused by electromagnetic radiation can result in erroneous measurements.
Although the product meets the strict regulations and standards which are in force in this respect, Leica Geosystems cannot completely exclude the possibility that the product may be disturbed by intense electromagnetic radiation, for example, near radio transmitters, two-way radios or diesel generators.

Precautions:
Check the plausibility of results obtained under these conditions.

Warning

If the product is operated with connecting cables attached at only one of their two ends, for example external supply cables, interface cables, the permitted level of electromagnetic radiation may be exceeded and the correct functioning of other products may be impaired.

Precautions:
While the product is in use, connecting cables, for example product to external battery, product to computer, must be connected at both ends.

Radios or digital cellular phones

⚠ Warning

Use of product with radio or digital cellular phone devices:

Electromagnetic fields can cause disturbances in other equipment, in installations, in medical devices, for example pacemakers or hearing aids and in aircraft. It can also affect humans and animals.

Precautions:

Although the product meets the strict regulations and standards which are in force in this respect, Leica Geosystems cannot completely exclude the possibility that other equipment can be disturbed or that humans or animals can be affected.

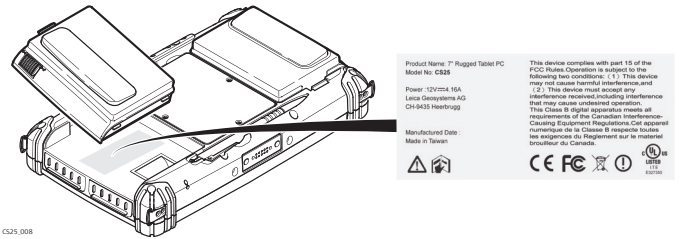
- Do not operate the product with radio or digital cellular phone devices in the vicinity of filling stations or chemical installations, or in other areas where an explosion hazard exists.
- Do not operate the product with radio or digital cellular phone devices near to medical equipment.
- Do not operate the product with radio or digital cellular phone devices in aircraft.

6.7 FCC Statement, Applicable in U.S.

Warning

Changes or modifications not expressly approved by Leica Geosystems for compliance could void the user's authority to operate the equipment.

Labelling CS25


Product Name: 7" Rugged Tablet PC
Model No: CS25
Power :12V⎓4.16A
Leica Geosystems AG
CH-9435 Heerbrugg
Manufactured Date :
Made in Taiwan
This device complies with part 15 of the FCC Rules.Operation is subject to the following two conditions: (1) This device may not cause harmful interference,and (2) This device must accept any interference received,including interference that may cause undesired operation.
This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.Cet appareil numerique de la Classe B respecte toules les exigences du Reglement sur le materiel brouileur du Canada.
CS25_008

7 Technical Data

7.1 CS25 Technical Data

Control unit	**CS25**	
	Display:	WSVGA (1024 x 600 pixels), graphics capable LCD, illumination, touch screen, colour
	Keyboard:	26 keys, illumination
	Touch screen:	Toughened film on glass
	Sound:	Integrated sealed speaker and microphone
	Digital camera:	Resolution: 1600 x 1200 pixels, fixed focus lens, image capture: JPEG
System	**CS25**	
	CPU:	Intel® ATOM™ Z530 processor
	System Chipset:	Intel US15W
	BIOS:	AMI System BIOS
	System Memory:	1 x SODIMM, Max 2 GB DDR2 400/533 (default 2 GB)
	Ethernet:	Realtek RTL811B chipset, 10/100/1000 Mbps
	Storage:	PATA interface support Mini-PCIe interface SSD (default 64 GB)

Audio: Audio out for headset, Micro-in for microphone jack, 1.5 W speaker (Internal)

Dimensions

Type	Length [m]	Width [m]	Thickness [m]
CS25	0.144	0.242	0.040

Weight

Type	Weight [kg]/[lbs]
CS25, with battery	1.3/2.9

Recording

Data can be recorded on the USB stick or in the internal memory.

Power

Type	Consumption [W]	External supply voltage
CS25	6 - 9	Nominal voltage 12 V DC (⎓)

Internal battery

Type	Battery	Voltage	Capacity	Operating time, typical*
CS25	LiPoly	7.4 V	ALG7-08B: 5.2 Ah	8 h

* Operating time depends on use of wireless communication devices.

Environmental specifications

Temperature

Type	Operating temperature [°C]	Storage temperature [°C]
CS25	-23 to +60	-40 to +70

Protection against water, dust and sand

Type	Protection
CS25	IP65 (IEC60529) Dust tight Protected against water projected in jets from any direction.

Humidity

Type	Protection
CS25	Up to 90 % The effects of condensation are to be effectively counteracted by periodically drying out CS25.

Interfaces

Type	RS232	USB Host	Bluetooth	LAN	WLAN	Audio
CS25	DSUB9	2* USB A	Class 2	RJ-45	802.11b/g	Micro-In, Audio-Out

7.2 Conformity to National Regulations

7.2.1 CS25

Conformity to national regulations

- FCC Part 15 (applicable in US)
- Hereby, Leica Geosystems AG, declares that the product CS25 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity can be consulted at http://www.leica-geosystems.com/ce.

Class 2 equipment according European Directive 1999/5/EC (R&TTE) for which following EEA Member States apply restrictions on the placing on the market or on the putting into service or require authorisation for use:

- France
- Italy
- Norway (if used in the geographical area within a radius of 20km from the centre of Ny-Ålesund)

- The conformity for countries with other national regulations not covered by the FCC part 15 or European directive 1999/5/EC has to be approved prior to use and operation.

Frequency band

Type	Frequency band [MHz]
CS25, Bluetooth	2402 - 2480
CS25, WWAN	UMTS/HSDPA 800 / 850 / 900 / 1900 / 2100 Quad-Band EGSM 850 / 900 / 1800 / 1900 GPRS multi-slot class 12 EDGE multi-slot class 12
CS25, WLAN	2400 - 2484

8 International Limited Warranty, Software Licence Agreement

International Limited Warranty

This product is subject to the terms and conditions set out in the International Limited Warranty which you can download from the Leica Geosystems home page at http://www.leica-geosystems.com/internationalwarranty or collect from your Leica Geosystems distributor. The foregoing warranty is exclusive and is in lieu of all other warranties, terms or conditions, expressed or implied, either in fact or by operation of law, statutory or otherwise, including warranties, terms or conditions of merchantability, fitness for a particular purpose, satisfactory quality and non-infringement, all which are expressly disclaimed.

Software Licence Agreement

This product contains software that is preinstalled on the product, or that is supplied to you on a data carrier medium, or that can be downloaded by you online according to prior authorisation from Leica Geosystems. Such software is protected by copyright and other laws and its use is defined and regulated by the Leica Geosystems Software Licence Agreement, which covers aspects such as, but not limited to, Scope of the Licence, Warranty, Intellectual Property Rights, Limitation of Liability, Exclusion of other Assurances, Governing Law and Place of Jurisdiction. Please make sure, that at any time you fully comply with the terms and conditions of the Leica Geosystems Software Licence Agreement.

Such agreement is provided together with all products and can also be referred to and downloaded at the Leica Geosystems home page at http://www.leica-geosystems.com/swlicense or collected from your Leica Geosystems distributor.

You must not install or use the software unless you have read and accepted the terms and conditions of the Leica Geosystems Software Licence Agreement. Installation or use of the software or any part thereof, is deemed to be an acceptance of all the terms and conditions of such Licence Agreement. If you do not agree to all or some of the terms of such Licence Agreement, you must not download, install or use the software and you must return the unused software together with its accompanying documentation and the purchase receipt to the distributor from whom you purchased the product within ten (10) days of purchase to obtain a full refund of the purchase price.

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Ask your local Leica Geosystems dealer for more information about our TQM program.

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- when it has to be **right**

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